STATE OF *our* AIR

Our Commitment, Our Community.

# Clean Air Update

## 2021 - 2022

U.S. SUGAR

Celebrating farming for 90+ years!

As part of our commitment to our local community, the people of U.S. Sugar are once again making the latest air quality data available in our series of "Clean Air Updates."

With nearly a dozen public and private air quality monitors, our farming area is one of the most heavily monitored regions in Florida. These monitors collect data about the amount of "$PM_{2.5}$" in the air, which are particles measuring 2.5 millionths of a meter or smaller. By comparison, a human hair is about 70 millionths of a meter wide. These "fine particulates" can be created by automobile exhaust, power plants, field dust, smoke, BBQs, pollen and many other natural and man-made sources.

Data collected from these public and private air quality monitors from Oct. 2021 - Dec. 2022 continues to confirm that the Glades' air quality remains "Good" which is the highest quality and cleanest category of air under EPA standards.

Over the course of many months, the data confirms that not only is our air safe and clean – whether area food crops are being harvested or not – but it remains cleaner than in many other areas of the state of Florida.

Also, the air quality in the agricultural region is nearly identical to or better than on the urbanized coast, which has little to no agricultural activity.

## Key Findings

- Glades air is consistently good year-round
- Our air quality at 6.45 $PM_{2.5}$ for the 2021-2022 harvest season was better than year round at 6.6 $PM_{2.5}$
- Our air quality is the same or better than on the coast
- The class-action lawsuit pushed by outside special interests was dropped after they failed to provide any evidence to legitimately challenge the air monitoring data from our community
- During the 2021-2022 Harvest Season there was no significant uptick in visits to local emergency rooms
  Source: www.floridatracking.com/healthtracking/
- Saharan dust, particularly during the summer months, notably affects overall air quality throughout South Florida

### Average Oct '21 - Dec '22 Air Quality Data (in $PM_{2.5}$)

Public air quality monitors for this time period confirm that the air quality in the Glades region is virtually the same as Royal Palm Beach and even better than Delray.

*"GOOD" STANDARD IS 12 & UNDER*

| | |
|---|---|
| **Belle Glade** | 6.4 |
| **Royal Palm Beach** | 6.3 |
| **Delray** | 7.0 |

### EPA Air Quality Index Standards and Belle Glade Air Quality Measurements Oct '21 through Dec '22

| Standard | EPA Established Particulate Count Range | Number of Days |
|---|---|---|
| Good | 0.0 to 12.0 | **306** |
| Moderate | 12.1 to 35.4 | 18 |
| Unhealthy for Sensitive Groups | 35.5 to 55.4 | 0 |
| Unhealthy | 55.5 to 150.4 | 0 |
| Very Unhealthy | 150.5 to 250.4 | 0 |
| Hazardous | 250.5+ | 0 |

**94.4%** of readings are in the top "Good" range



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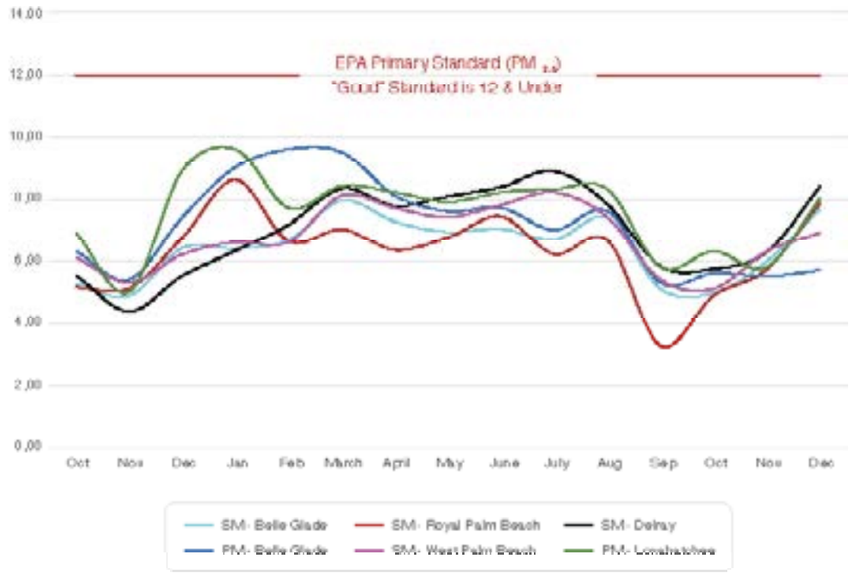
### Air Quality Palm Beach County Oct '21- Dec '22 Monthly $PM_{2.5}$ Average State Monitors (SM) & Private Monitors (PM)*




* PM (Private Monitors) data from Oct '21- Dec '22 Source: www.floridadep.gov/air
* Data quality assurance is conducted on a quarterly basis
* All private industry monitors are high quality professional grade monitoring devices

*"Years of public data show the rural Glades farming communities enjoy clean air – among the cleanest in the state.*

*Additionally, medical records and statements from local physicians and public health professionals indicate no adverse link between farming practices and respiratory issues and associated poor health outcomes. While our communities have health challenges, the data strongly opposes our farmers as the source of them."*

R.D. Williams, CEO
Hendry Regional Medical Center

Around-the-clock data collected at state monitoring sites in Belle Glade from the start of the harvest season in October 2021 through December of 2022 show an average measurement of 6.6 $PM_{2.5}$ per cubic meter.

During the October to May harvest season, when field burning takes place, the average was 6.45 $PM_{2.5}$ per cubic meter.

Out of 444 days of monitoring in the Glades, 424 days showed air quality in the "Good" category, with only 20 days in the very low range of "Moderate" readings, averaging 14.1 $PM_{2.5}$.

It is important to note that of those 20 days of "Moderate" readings, 13 readings were taken between June and September, which is after harvest season.

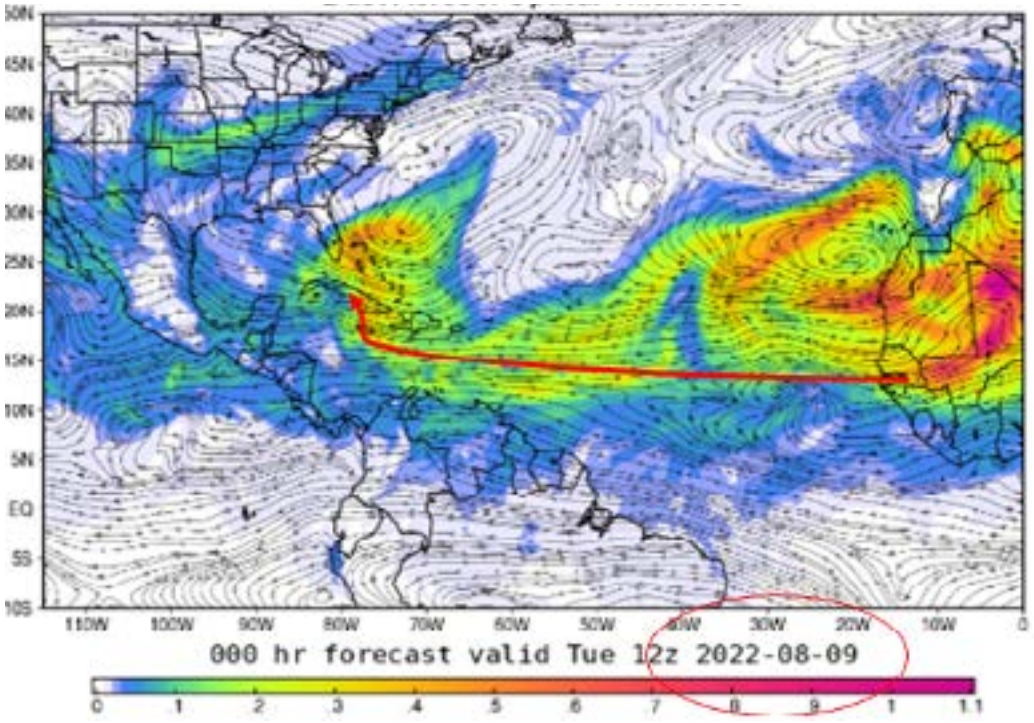
Data from private monitors taken during the October - June harvest season confirmed these readings. Earlier this year, the class-action lawsuit that had been pushed by outside special interests was dropped.

These opponents, who attacked local farmers, could not provide any evidence to legitimately challenge 36 months of consistent air quality data confirming that the air throughout the farming community is safe and meets all state and federal clean-air standards.

However, while there have been continued negative news articles about safe, controlled pre-harvest burns, none of them have been based on sound science, facts or on-the-ground data because all of that data continues to show that our air is clean, safe and among the best in the state!

NASA/GMAO - GEOS Forecast Initialized On 12z 08/09/2022

Dust Aerosol Optical Thickness




## Effect of Saharan Dust and Wildfires

The summer days of "Moderate" air quality may be attributed to the concentration of Saharan Dust which flows persistently across South Florida in greater density throughout the summer months. TV coverage of Saharan Dust influence on our local area was common.

The Dust Aerosol Optical Thickness satellite image from NASA included above shows the Saharan Dust traveling and its influence over the southern half of Florida on August 9, 2022.

As shown in the red line in the map above, during summer months, Saharan Dust leaves Africa on westerly winds, crosses the Atlantic and moves toward the North American Continent. The blues, greens, yellows and reds on the map reflect increased levels of $PM_{2.5}$ & $PM_{10}$, which contribute to:

- Increased temperatures with more frequent and intense heat waves
- Increased particle haze
- Drier air, which minimizes storms and hurricanes

In addition, wildfires such as the late May 2021 Bobcat Wildfire in the Everglades, have resulted in air quality monitors recording hourly spikes in the "Unhealthy" range and even reaching the "Hazardous" categoy at 334.9 $PM_{2.5}$.

*Come Visit our Community!*

For more information and to read prior year's reports, please visit:
2020 – 2021 https://www.ussugar.com/wp-content/uploads/2022/02/2021-State-of-Our-Air-.pdf
2019 – 2020 https://www.ussugar.com/wp-content/uploads/2021/12/CleanAirReport.pdf